



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,676	12/24/2002	Takashima Mitsuru	7266/66308-RDK	2637

7590

01/12/2004

Robert D Katz
Cooper & Dunham
1185 Avenue of the Americas
New York, NY 10036

EXAMINER

MARMOR II, CHARLES ALAN

ART UNIT

PAPER NUMBER

3736

DATE MAILED: 01/12/2004

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,676

Applicant(s)

MITSURU, TAKASHIMA

Examiner

Charles A. Marmor, II

Art Unit

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 2-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 December 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____.

DETAILED ACTION

1. This Application is national stage entry of PCT/JP00/05902. The Examiner acknowledges the preliminary amendments to claims 2-5 and the cancellation of claims 1 and 6-13. Claims 2-5 are pending.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “10” has been used to designate both an “air type sound sensor” and a “closed cabinet.” A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “30” has been used to designate both a “lead wire” and a “sensor.” A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “41” has been used to designate both a “hose” and an “air pipe.” A proposed

Art Unit: 3736

drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “70” has been used to designate both a “person” and a “plate-shaped member.” A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

6. The disclosure is objected to because of the following informalities:

- a. On page 8, line 17, “plane A-A” apparently should read --plane A-A--.
- b. On page 10, line 12, “sensor 20” apparently should read --sensor 21--.
- c. The list of reference characters on pages 36 and 37 apparently should be deleted as all of the reference characters are previously defined in the detailed description of the specification.

Appropriate correction is required.

7. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

8. Claim 2 is objected to because of the following informalities: in line 8, "each of the interior" apparently should read --the interior of each--. Appropriate correction is required.

9. Claim 3 is objected to because of the following informalities:

a. In line 3, "non-directional microphone or/and pressure sensor" apparently should read --closed air type sound sensor--.

b. In line 6, "each of the interior" apparently should read --the interior of each--. Appropriate correction is required.

10. Claim 4 is objected to because of the following informalities: in line 3, "non-directional microphone or/and pressure sensor" apparently should read --closed air type sound sensor--. Appropriate correction is required.

11. Claim 5 is objected to because of the following informalities: in lines 2-3, "wherein a closed air type sound sensor" apparently should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3736

13. Claims 2-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, the phrases "or a like" and "or the like" render the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). The aforementioned phrases occur in lines 4 and 18 of the claim.

Regarding claims 2-5, the use of "or/and" in claim language renders the claim indefinite. It is unclear whether the limitation(s) preceding "or/and", the limitations following "or/and", or both are part of the claimed invention, thereby rendering the scope of the claims unascertainable. The aforementioned phrase occurs in lines 11 and 21 of claim 1, line 3 of claims 3 and 4, and line 6 of claim 5.

Regarding claim 2, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). The aforementioned phrase occurs in lines 22-23 of the claim.

Further regarding claim 2, in lines 17-18, the limitation "in a pertaining shape" is vague and indefinite. One cannot be certain what the limitation is intended to refer to.

Further regarding claim 2, in lines 17-19, the limitation "human body is placed on said closed cabinets... directly or with bed clothes or the like interposed therebetween" renders the claim indefinite as the limitation apparently is inaccurate. The plate-shaped member is placed on the closed cabinets, apparently between the human body and the closed cabinets, so the human body cannot be placed directly on the closed cabinets as said limitation recites.

Art Unit: 3736

Claim 2 recites the limitation "said closed cabinets of the closed air type sound sensors" in lines 19-20. There is insufficient antecedent basis for this limitation in the claim. The closed air type sound sensors are not recited as having closed cabinets prior to this recitation in the claim.

Further regarding claim 2, the limitation "the closed air type sound sensors being detected by the non-directional microphones or/and pressure sensors" renders the claims indefinite because it is unclear how many closed air type sound sensors are included in the apparatus. The antecedent of this limitation only recites a single closed air type sound sensor. Moreover, if the non-directional microphone or/and pressure sensor forms the closed air type sound sensor, it is unclear how the non-directional microphone or/and pressure sensor detects air pressure within itself.

Claim 5 recites the limitation "to minimize the influence upon said non-directional microphone or/and pressure sensor for detecting and converting an air pressure into an electric signal" in lines 5-8. There is insufficient antecedent basis for this limitation in the claim. There is no influence recited in the claims prior to this recitation.

Claim Rejections - 35 USC § 101

14. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

15. Claim 2 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 2 recites that a human body is placed on the closed cabinets.

Art Unit: 3736

This is a positive recitation of the human body. However, the human body is non-statutory subject matter and cannot be positively recited.

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claims 2-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Scanlon ('005).

Scanlon teaches acoustic monitoring systems for collecting biomedical information. The systems **12** include a plurality of closed cabinets **11** that are airtight. Each cabinet has a variable internal volume and is made of rubber or plastic materials (col. 4, lines 57-60). Each cabinet is filled with a fluid and a spring member in the form of foam, suspension structures or partitions. Air is a type of fluid. A closed air type sound transducer **14** in the form of a microphone (col. 1, line 66 - col. 2, line 2) or pressure sensor (col. 4, lines 40-41) detects and converts fluid pressure in each of the cabinets into an electric signal. The apparatus can be built into a crib, seat or gurney where the body-contacting surface of the crib, seat or gurney forms a plate-shaped member on the plurality of closed cabinets, which may be spaced apart or adjacent to one another. The sound transducer **14** can include a sound transducer in each of the closed compartments (fig. 3) or can be mounted at an end portion of a hose **16** connected to the closed cabinets (fig. 2). The air pressures within the closed cabinets, when a living body is placed on

Art Unit: 3736

the closed cabinets, are detected by the sound sensor to measure biomedical information such as breathing, heart rate and movement of the living body (col. 2, lines 24-27).

Allowable Subject Matter

18. Claim 5 apparently would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

19. The following is a statement of reasons for the indication of allowable subject matter:

No prior art of record teach or fairly suggest a biomedical information collection apparatus, as claimed by Applicant, where each of the closed cabinets includes a microscopic pinhole to establish an air leak countermeasure.

Conclusion


20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pelz ('720) teaches a system for monitoring the physical condition of a patient. Halleck et al. (483) teach a sensor for detecting very low frequency acoustic signals. Woodward ('441) teaches a sensorbed. Tao ('144) and Pinsonneault et al. ('332) teach movement monitors. Scanlon ('460) teaches a motion and sound monitor. Shimada et al. teach a vital signal sensing device.

Art Unit: 3736

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Marmor, II whose telephone number is (703) 305-3521. The examiner can normally be reached on M-TH (7:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (703) 308-3130. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.


Charles A. Marmor, II
Primary Examiner
Art Unit 3736

cam
January 7, 2004